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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,412	09/30/2003	Ming-Shun Yang	BHT-3245-5	2685
7590 10/05/2007				
BRUCE H. TROXELL SUITE 1404 5205 LEESBURG PIKE FALLS CHURCH, VA 22041			EXAMINER COLE, ELIZABETH M	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 10/05/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/673,412

**Applicant(s)**

YANG, MING-SHUN

**Examiner**

Elizabeth M. Cole

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/1/07.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1794

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al, U.S. Patent No. 6,100,208 in view of Roe et al, U.S. Patent No. 5,834,381. Brown discloses a protective fabric which may comprise first and second nonwoven outer layers and a water impermeable, vapor permeable center layer. See abstract. The first and second nonwoven outer layers may comprise bicomponent fibers and may further comprise polyolefins, polyamides and polyesters. See col. 7, lines 54-56. The water impermeable, vapor permeable center layer may comprise polyurethane films, (col. 9, line 64) as well as polyolefin films such as polyethylene and polypropylene films, (col. 10, lines 7-22). The layers may be bonded by ultrasonic bonding, thermal point bonding and/or adhesive bonding. See col. 11, lines 29-33. Brown teaches that the fabric may comprise additional outer and/or inter layers, but differs from the claimed invention because it does not specifically teach employing a woven or knitted layer in conjunction with the center barrier layer. Roe et al teaches that both woven and knitted reinforcements, (col. 3, lines 58-65), may be used in forming protective materials which comprise a polymeric film layers in order to reinforce the films and produce a fabric having improved tear resistance. See col. 1, line 66 – col. 2, line 15. The reinforcing fabrics can be nylon, (polyamide). See col. 2, lines 31-39. The polyurethane resin of the film layers would necessarily coat the fibers of the reinforcing fabric after the layers

Art Unit: 1794

and the reinforcing fabric were united by means of heat and pressure. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a reinforcing fabric layer within the central layer of Brown et al. One of ordinary skill in the art would have been motivated to include the central reinforcing fabric layer by the expectation that this would improve the strength and tear resistance of the Brown fabric as taught by Roe.

3. Applicant's arguments filed 8/1/07 have been fully considered but they are not persuasive. Applicant argues that Brown does not teach the claimed central layer and two outer layers directly bonded together. However, Brown does teach a three layered material comprising outer fabric layers as claimed and a central layer of liquid impermeable, vapor permeable polyurethane. Brown differs in that Brown does not teach a reinforcing layer in the polyurethane layer. This feature, however, is taught by Roe.

4. Applicant argues that Roe only teaches films and does not teach coating a fabric scrim with resin. However, there is no difference between a resin and a film. Roe teaches reinforcing polymeric resins with fabric layer. Since the layers of Brown and Roe are united by heat and pressure, the resins would coat the fabric layers. Further, with regard to whether Roe teaches applying the resin as a coating or as a film, the method by which the article is made does not patentably distinguish an article claim absent a showing that any process differences would result in an unobvious difference between the claimed invention and the prior art product.

Art Unit: 1794

5. Applicant argues that Roe does not teach the claimed structure of outer fabric layers and the inner layer of the polyurethane and fabric. However, Brown teaches the claimed structure with the exception of the inner fabric layer to reinforce the polyurethane. Roe is only relied on for this teaching.

Applicant argues that the examiner has improperly picked and chosen among the references and that there is no motivation to combine the references. However, KSR forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex parte Smith*, -- USPQ2d--, slip op. at 20, (Be. Pat. App. & Interf. June 25, 2007) (citing KSR, 82 USPQ2d at 1396) (available at <http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf>).

Additionally, it is noted that Brown teaches the claimed structure with the exception of the reinforcing layer in the middle layer. Roe teaches the benefits of providing such a reinforcing fabric layer. Therefore, the references themselves teach the claimed invention.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1794

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

/Elizabeth M. Cole/  
Primary Examiner, Art Unit 1771

e.m.c